REMARKS

I. Status of the Application

In the Office Action dated November 8, 2006, Examiner rejected claims 1-11 under 35 U.S.C. § 112, second paragraph, as being indefinite, and under 35 U.S.C. § 102(b) as being anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as obvious under U.S. Patent No. 5,576,356 to Leir et al. ("Leir"). By the above Amendments, claim 1 has been amended and claims 12-16 have been added. Thus, claims 1-16 are at issue herein.

II. Substance of Examiner Interview

As an initial matter, counsel for Applicants would like to thank Examiner Moore for the time and courtesy extended during the January 31, 2007 Interview for this Application. The following summary constitutes a recordation contemplated by 37 C.F.R. § 1.133 and MPEP § 713.04.

A. Brief Description of Nature of any Exhibit or Demonstration

None.

B. Identification of Claim(s) Discussed

Claims 1-11 were discussed.

C. Identification of Specific Prior Art Discussed

U.S. Patent No. 5,576,356 to Leir et al. was discussed.

D. Indication Whether Agreement was Reached and Nature of Same

Agreement was reached. Applicants and Examiner agreed that Applicants would supply data as to the composition in comparative Sample E at page 22 of the present application to provide a better comparison of the prior art to the composition in the Example. Examiner and Applicants also agreed that Applicants would submit the new claims.

In light of the discussions during the Interview and Examiner's suggestions, Applicants submit that the claims of the present Application are now in condition for allowance. Further, Applicants submit that the above Amendments add no new matter and raise no new issues that would require further consideration or an additional search

III. Rejection Under 35 U.S.C. §112

Examiner has rejected claims 1-11 under 35 U.S.C. § 112, second paragraph as being indefinite. Applicants respectfully traverse Examiner's rejection. Nonetheless, Applicants

amended the claims such that the invention is more clearly described. In view of the Amendments and Remarks herein, Applicants submit that Examiner's rejection under 35 U.S.C. § 112 is now moot. Accordingly, Applicants respectfully request reconsideration and withdrawal of the same.

IV. Rejection In View of Leir Under 35 U.S.C. §102(b) or in the Alternative, Under 35 U.S.C. §103(a)

Claims 1-11 stand rejected under 35 U.S.C. §102(b) as being anticipated by, or in the alternative, under 35 U.S.C. 103(a) as obvious in view of Leir. In order for a reference to act as a §102 bar to patentability, the reference must teach each and every element of the claimed invention. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 771 (Fed. Cir. 1983). Without the required teaching of "each and every element" as set forth in the claims, it is improper to maintain such rejections under §102(b). Leir does not teach each and every element of the claimed invention, and thus fails as an anticipatory reference. Similarly, Applicants' invention is also not obvious in view of Leir.

Leir et al. describes a radiation cured silicone release coating from solutions of relatively low levels of a polyorganosiloxane substituted with small amounts of reactive functional groups dissolved in a co-reactive monomer or mixture of monomers and containing a photoactive catalyst (col. 4, lines 25-29). Leir prepares their coating with solvent but without heating. As such, Leir specifically states that one of the advantages of their invention is that "a need exists for rapidly curing silicone coating which can be rapidly and completely cured in air" (emphasis added) (col. 4, lines 4-5). Also in column 9, lines 43 to 45, Leir teach that drying air should be "less than the boiling point of the constituents thereof." Many of the components in Leir et al. are monomeric in nature and would boil at relatively low temperatures. The desire and design is for those components to remain in the coating as they are functional and should react into the polymer matrix. However chemical reactions are always incomplete, and any of the monomers left unreacted would be undesired volatiles.

The present invention is directed to release liners. In the invention, a radiation curable silicone release agent is dispersed in an organic solvent and then applied onto the surface of a substrate. Dispersion of the silicone release agent in an organic solvent provides for smoother surfaces, better uniform coating and better adhesion of the release agent. The coated substrate is exposed to active conditions sufficient to remove the solvent. In particular, the coated substrate

is heated (in the case of new claims 12-14 to a temperature of at least 200° F) optionally in the presence of high velocity air. The substrate is then exposed to radiation to cure the silicone release agent. The result is a release liner having significantly reduced amounts of undesirable components, such as reduced total silicone extractables (measured as micrograms/square cm) and/or volatile silicone compounds (measured in ppm). Preferably, the release liners of the invention have no more than about 10 parts per million and more preferably less than about 2.0ppm of volatile silicone compounds in the cured product (see specification at p. 2). This release liner, having the specified properties is not taught or suggested by Leir et al.

Comparison of Applicants' invention to that of a "conventional" release liner prepared without solvent and without a heating step are provided, wherein "[s]amples of release liners of the invention and conventional UV cured silicone based release liners were analyzed for volatiles content by outgassing as described above." From a simple comparison of the results, it is clear that Applicants' invention, Samples C and D in the present application, have a much lower level (in fact one-tenth of the amount) of siloxanes, or outgassing components (57 nanograms/square centimeter and 32 nanograms/square centimeter, respectively), than the "conventional UV curable release liner prepared without solvent and cured without a heating step," which has a much higher siloxane reading of 474 nanograms/square centimeter. Applicants respectfully submit that it is the heating step that leads to a product having lower levels of volatiles, and the examples demonstrate this fact.

There is absolutely no teaching in Leir et al. of the use of heat and optionally high velocity air to drive off the solvent, nor is there any teaching of measuring the reduction in total extractables and/or volatile organic compounds. Applicants respectfully submit that it is the difference in these processes, "passive evaporation" of solvent, as taught in Leir et al., versus using heat and optionally high velocity air to "actively driving off" the solvent as taught and claimed by Applicants, that results in a product having the desired reduction of total extractables and/or volatile silicone compounds in the cured release liner of Applicants' invention. As explained above, and during the recent interview with Examiner Moore, it is the act of "actively driving off" of solvent that Applicants believe results in a product having the reduction in total extractables and/or volatile silicone compounds found in Applicants' product.

This distinction is further supported by the enclosed Declaration of one of the inventors, Danny Charles Thompson. In his Declaration, Mr. Thompson provides evidence of the

composition of comparative Sample E, which illustrates a formulation similar to that of Leir et al. The declaration supports the assertion that a conventional release liner composition, such as that in Leir, does not have the same low level of siloxanes or outgassing components as the release liner disclosed and claimed by Applicants. These distinctions were also discussed during the recent interview with Examiner Moore.

Further, the working examples of Leir et al., show solvent systems that are heated after UV curing. However, Applicants submit that the alleged heating step of Leir et al., is done as part of the release force test protocol, after the liner is laminated to the tape. This is not the same process as applying heat and optionally high velocity air prior to UV curing to reduce the amount of undesirable total silicone extractables, as in Applicants' invention.

Applicants submit that these key differences between the processes of the patentee and Applicants do not inherently lead to products having the same properties:

> To establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999).

Applicants respectfully submit that the Examiner has misapplied the concept of "inherency" in view of the Leir reference. Further, "[i]n relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Int'f 1990). As discussed above, there are significant differences between the Applicants' process and that of Leir et al., which results in the coating comprising no more than about 1.5 micrograms per square centimeter total silicone extractables. The fact that Applicants actively drive off solvent using heat, and optionally high velocity air, is what Applicants believe results in a product having low levels of extractables. The missing elements of extremely low levels of extractables is not necessarily present in Leir, with this assertion being supported in the fact that there is no teaching or suggestion of this kind in Leir. Therefore, the application of inherency is erroneous.

In the Office Action it is stated that the examples using a reactive diluent and no solvent appear to inherently meet the claimed invention. Applicants submit, however, Leir actually teach away from that assumption. In describing the reactive diluents, Leir define them as "those

which undergo cationic co-polymerization with the epoxy functional or other reactive functional silicone fluids described above, and having a sufficiently high boiling point above about 100°C, preferably above 150°C, so as not to evaporate from the substrate before curing." (col. 7, lines 13-18). In addition, Leir states "[i]f heating is utilized, the temperature can range from about room temperature (22°C) to a temperature less than the boiling point of the composition or constituents thereof. . . ." (col. 9, lines 38-41). The intent is that the reactive diluent will in fact react with the polymer network, and not boil off during the coating process. Therefore, Applicants submit that the heating benefits of their invention, and thus the resulting product, is not met by the solventless systems of Leir.

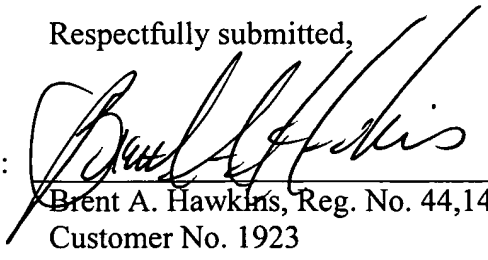
In view of the foregoing, Applicants have demonstrated that both its composition and process steps of the present invention are different from that of Leir resulting in a product different from that of Leir. Thus, Applicants respectfully request that the rejection under §102(b) or alternatively, under §103(a) be withdrawn with respect to Claims 1-11.

V. Conclusion

In view of the foregoing, Applicants respectfully submit that claims 1-16 are patentable over the cited prior art, and are in condition for allowance. Applicants respectfully request that the Examiner reconsider and withdraw the rejections of claims 1-16 and enter an allowance of the same. Applicants further invite the Examiner to contact the undersigned attorney to discuss any matters pertaining to the present Application.

Respectfully submitted,

Dated: February 7, 2007

By: 

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